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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,231	01/11/2002	Masaki Nakano	03500.016103	4817

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EXAMINER	
RICHER, AARON M	
ART UNIT	PAPER NUMBER
2628	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/042,231	NAKANO, MASAKI	
	Examiner	Art Unit	
	Aaron M. Richer	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 January 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 15-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 15-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed January 26, 2007 have been fully considered but they are not persuasive. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1 and 15-20 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. These claims recite a resolution converting means that converts an image to which a process by said image quality adjustment process means has been executed, and also an image quality adjustment process means that executes the process to the image to which the conversion by said resolution converting means is to be executed. Applicant's specification, however, contradicts this, showing in fig. 1 and fig. 4 that the resolution converter acts on an image that has *not yet* been adjusted by the image quality adjustment process means.

Applicant further discloses on p. 12, line 21-p. 13, line 4 of the specification that the resolution converter halves the size of an original image and that *subsequently* image quality adjustment is executed. For prior art purposes, examiner has interpreted the claims as if they recited what is contained in the specification about the order of operations, in other words that the resolution conversion occurs before the image quality adjustment.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 15-17, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suga (U.S. Patent 6,791,624) in view of Yokoyama (U.S. Patent 6,449,018).

6. As to claims 1, 19, and 20, as best understood, Suga discloses an image processing apparatus comprising:

resolution converting means for converting an image into a reduced image (col. 6, lines 25-30)

multiscreen synthesis means for composing one screen by arranging plural images in the one screen (fig. 10-11; col. 8, lines 25-44; col. 9, lines 13-18; col. 11, lines 22-27);

image quality adjustment value storage means for storing image quality adjustment values for plural kinds of image quality adjustment processes (fig. 1, element 110; fig. 8-9; col. 9, line 55-col. 10, line 13);

image quality adjustment process means for executing the image quality adjustment processes for plural images on the basis of the image quality adjustment values stored in said image quality adjustment value storage means (col. 9, lines 37-49; col. 10, lines 13-23); and

control means for converting an input image into a first image to which an image quality adjustment process is executed by said image quality adjustment process means on the basis of an image quality adjustment value which is determined in advance before performing an image quality adjustment operation stored in said image quality adjustment value storage means (col. 9, lines 37-65; col. 10, lines 13-23; col. 4, lines 34-47), and similarly for converting the input image into a second image to which an image quality adjustment process is executed by said image quality adjustment means on the basis of an image quality adjustment value for newly performing an adjustment operation, and then for displaying the converted first and second images and a pre-conversion third image on one screen with an arranged state by said multiscreen synthesis means (col. 9, lines 37-42; col. 4, lines 34-47; col. 8, line 64-col. 9, line 3 and col. 11, lines 22-27; also see col. 8, lines 33-38 for a pre-conversion "default" third image),

wherein the image quality adjustment value which is determined in advance is a value which is not updated in the adjustment operation (values shown in fig. 8 are

determined in advance; col. 8, lines 50-63; col. 10, lines 5-13; the values are described as "current set values" not adjusted values),

wherein said resolution converting means converts an image to which a process by said image quality adjustment process means has been executed (see fig. 5-6; the resolution-converted image is the image later adjusted for quality), and

wherein said image quality adjustment process means executes the process to the image to which the conversion by said resolution converting means is to be executed (see fig. 5-6; the resolution-converted image is the image later adjusted for quality).

Suga does not disclose an apparatus wherein said control means can display multiple images with respective sizes different from each other. Yokoyama, however, discloses a split screen wherein respective sizes of images can differ (fig. 3b-3c; also see col. 3, lines 2-5 for disclosure of more than two images on a screen). The motivation for this is to give priority to a "main" image (col. 1, lines 38-56). It would have been obvious to one skilled in the art to modify Suga to show different images at different sizes in order to give priority to a main image as taught by Yokoyama.

7. As to claim 15, Suga discloses an apparatus further comprising image reduction means for reducing the input image, wherein said multiscreen synthesis means composes the one screen by arranging the plural images reduced by said reduction means (col. 4, lines 34-47, col. 7, lines 47-61, col. 8, lines 45-col. 9, line 4).

8. As to claim 16, Suga discloses an apparatus further comprising trimming means for trimming a part of the input image, wherein said multiscreen synthesis means

composes the one screen by arranging the plural images trimmed by said trimming means (col. 4, lines 34-47, col. 7, lines 47-61, col. 8, lines 45-col. 9, line 4).

9. As to claim 17, Suga discloses an apparatus wherein the image quality adjustment value which is determined in advance before performing the image quality adjustment operation is a value which was previously set at a time of manufacturing of said apparatus (col. 9, lines 56-65).

10. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suga in view of Yokoyama and further in view of Matsuzaki (U.S. Patent 6,492,982).

11. As to claim 18, Suga discloses an apparatus wherein the image quality adjustment value includes the image quality adjustment value of each of lightness, contrast, hue, and sharpness (fig. 8-9). Neither Suga nor Yokoyama expressly discloses an apparatus wherein the image quality adjustment value includes chromaticity and RGB balances. Matsuzaki, however discloses these image quality adjustment values with motivation being to enhance image display (fig. 20; col. 11, lines 26-45). It would have been obvious to one skilled in the art to modify Suga in view of Yokoyama to adjust chromaticity and RGB balances in order to enhance image quality as taught by Matsuzaki.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M. Richer whose telephone number is (571) 272-7790. The examiner can normally be reached on weekdays from 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AMR
3/31/07

KEE M. TUNG
SUPERVISORY PATENT EXAMINER